L-tryptophan for treatment-resistant depression

L-tryptophan, the amino acid precursor of serotonin, is not widely used as an adjunctive treatment despite its recommendation in treatment-resistant depression (Taylor, 2001). Perhaps inexperience, limited supporting data (Shaw et al, 2002), or the inconvenience of full blood count monitoring and patient registration deter prescribers. Numerous authors have reported on mood changes associated with L-tryptophan depletion (including Bell et al, 2001), but few recent studies consider efficacy. We wish to report our experience of L-tryptophan (Optimax) use.

A complete list of patients prescribed L-tryptophan between 1999–2002 under the care of one consultant psychiatrist was obtained from the central Optimax registration service. Fifty-three individuals were identified, of whom 52 case records were available. Response to augmentation as measured on Optimax monitoring forms was recorded (no response, satisfactory, good), along with details of continuation or cessation and reasons for discontinuation.

Thirty-two patients were female, twenty male. The age range was 22–66 (average age 45.4 years).

Twenty-nine patients (56%) reported an improvement in mood following commencement of L-tryptophan (23% satisfactory, 33% good). Twenty-three (44%) reported no response. Eight patients discontinued L-tryptophan following recovery. Twenty-one discontinued for other reasons: lack of response (ten), reluctance to take L-tryptophan (two), following overdose (one), feeling worse (one), side-effects (six), unspecified (one). The side-effects reported were stiffness (one), irritability (one), dizziness (two), unspecified (two).

No patients ceased treatment as a result of developing eosinophilia or symptoms of eosinophilia myalgia. Eighty-six per cent of the patient sample tolerated L-tryptophan. Although unsophisticated, these results support the use of L-tryptophan as an augmentation strategy in treatment-resistant depression, bringing about symptom improvement in 56% of the sample. This compares favourably to the published 50–60% response rate with lithium augmentation.


*Filippo Passetti Psychiatry Senior House Officer, Cambridgeshire and Peterborough Mental Health NHS Trust, George Mackenzie House, Box 310, Fulbourn Hospital, Cambridge CB1 5EP.

Claire Dibben Staff Grade Psychiatrist